

THE AMENDMENTS

In the Specification:

Please amend the paragraph starting at page 1, line 3:

~~This application is a continuation in part of U.S. Application No. 09/743,103, filed August 3, 2001; which is a National Stage of International Application PCT/DE99/02094, filed July 1, 1999; which claims the priority of DE 198 20 473.5, filed July 1, 1998. This application is also a~~
continuation-in-part of U.S. Application No. 10/633,484, filed July 31, 2003, which claims the benefit to a foreign application EP 02017313.4, filed August 1, 2002.

Please amend the two paragraphs at page 3, lines 24-28:

Figure 1 shows the detection of the ~~cdk4 overexpression in HPV16-transformed cervical carcinoma cells~~ CaSki overexpression of cdk6 and p19 in HPV16-transformed NIH3T3 cells.
~~The indications 4 h, 8 h, 12 h, 24 h refer to the times of cell extract removal.~~ The indication co stands for control ~~while arr indicates the addition of the serum.~~

Figure 2 shows the detection of the ~~overexpression of cdk6 and p19 in HPV16-transformed NIH3T3 cells~~ the cdk4 overexpression in HPV16-transformed cervical carcinoma cells CaSki.
The indications 4 h, 8 h, 12 h, 24 h refer to the times of cell extract removal. The indication co stands for control while arr indicates the addition of the serum.

Please amend the paragraph starting at page 8, line 4:

According to the present invention, the body samples may be solubilized in any suitable solvent. Such solvents may for example be aqueous solutions of chaotropic agents such as e.g. urea, GuaSCN, Formamid, of detergents such as anionic detergents (e.g. SDS, N-lauryl sarcosine, sodium deoxycholate, alkyl-aryl sulphonates, long chain (fatty) alcohol sulphates, olefine sulphates and sulphonates, alpha olefine sulphates and sulphonates, sulphated monoglycerides, sulphated ethers, sulphosuccinates, alkane sulphonates, phosphate esters, alkyl isethionates, sucrose esters), cationic detergents (e.g. cetyl trimethylammonium chloride), non-ionic detergents (e.g. ~~Tween 20~~, TWEEN®-20, polyethylene glycol sorbitan monolaurate; ~~Nonidet nonidet~~ P-40, ~~Triton X-100~~, TRITON® X-100, t-octylphenoxy polyethoxyethanol; NP-40, ~~Igepal CA-630~~,

IGEPAL® CA 630, nonidet P 40; N-Octyl-Glucosid) or amphoteric detergents (e.g. CHAPS, 3-Dodecyl-dimethylammonio-propane-1-sulfonate, Lauryldimethylamine oxide) and/or of alkali hydroxides such as e.g. NaOH or KOH. Generally any suitable liquid may be used as a solvent in the lysis buffer of the present invention. The liquid may be organic or inorganic and may be a pure liquid, a mixture of liquids or a solution of substances in the liquid and may contain additional substances to enhance the properties of the solvent. In certain embodiments, where lysis of cells may be achieved without the use of detergents, hyper- or hypotonic solutions or buffers or simply water or an organic liquid may be used as solvent. Any liquid that is suited to solubilize the cellular components of body samples in total or in parts may be regarded as a lysis buffer as used herein. Thus lysis buffers as used herein need not contain buffer substances or have buffer capacity.

Please amend the paragraph starting at page 14, line 19:

Generally, the lysis buffer may be any suitable solvent known to those of skill in the art. The lysis buffer for use in the kit may, for example, be organic or aqueous solutions of chaotropic agents such as e.g. urea, GuaSCN, Formamid, of detergents such as anionic detergents (e.g. SDS, N-lauryl sarcosine, sodium deoxycholate, alkyl-aryl sulphonates, long chain (fatty) alcohol sulphates, olefine sulphates and sulphonates, alpha olefine sulphates and sulphonates, sulphated monoglycerides, sulphated ethers, sulposuccinates, alkane sulphonates, phosphate esters, alkyl isethionates, sucrose esters), cationic detergents (e.g. cetyl trimethylammonium chloride), non-ionic detergents (e.g. ~~Tween~~ TWEEN® 20, ~~Nonidet~~ nonidet P-40, ~~Triton~~ TRITON® X-100, NP-40, ~~Igepal~~ IGEPAL® CA-630, N-Octyl-Glucosid) or amphoteric detergents (e.g. CHAPS, 3-Dodecyl-dimethylammonio-propane-1-sulfonate, Lauryldimethylamine oxide) and/or of alkali hydroxides such as e.g. NaOH or KOH. In certain embodiments, where lysis of cells may be achieved without the use of detergents, hyper- or hypotonic solutions or buffers or simply water or an organic liquid may be used as solvent. Any liquid, that is suited to solubilize the cellular components of body samples in total or in parts may be regarded as a lysis buffer as used herein. Thus, lysis buffers as used herein need not contain buffer substances or have buffer capacity.

Please amend Table 1 at page 15:

Table 1

Lysis buffer	solubilization of p16INK4a in Western blot	compatibility with Elisa
Detergents:		
0.1-1% SDS	+	+/-
0.2-3% SDS	+	< 0.5 %
0.2-3% DOC	++	+/-
0.1-1% n-Octylglycoside	+	yes
0.1-3% Triton <u>TRITON® X-100</u>	+	yes
0.1-1% Chaps	+	nd
Detergent-Mix:		
RIPA (1%NP40, 0.5%DOC, 0.1%SDS, PBS) 40-100%	++	yes
SOX (0.5% DOC, 0.5% n- Octylglycoside) 40-100%	+	yes
mtm lysis buffer (3% Triton <u>TRITON®</u> <u>X-100</u> , 0.4 % SDS, PBS)	++	yes

Please amend the paragraph starting at page 23, line 13:

Cervical swab brushes were given into 15 ml vessels, containing 2 ml of mtm lysis buffer (2% ~~Triton~~ TRITON® X-100, 0.4% SDS, 0.6mM PMSF in PBS). Cervical cells present in the brush were lysed for at least 20h. The lysates of the cervical swab samples were then transferred in 2 ml tubes and were centrifuged at 4°C (15 min at 28.000 x g (16.600rpm HighspeedCentrifuge JEC Multi RF)); Supernatant was transferred to a fresh tube. The supernatant may be stored at -20 °C.

Please amend the paragraph starting at page 23, line 27:

- 7 x 250µl washing buffer (0.1% ~~Tween20~~ TWEEN® 20 (v/v) in PBS)

Please amend the paragraph starting at page 26, line 19:

10 ml of the cell suspensions from the individual cervical swab samples provided as ~~PreservCyt™~~ PRESERVACYT® (liquid chemical preparatory solution for use in collecting and preserving cells for examination)-fixed materials were transferred to a 15 ml reaction vessel. The samples were centrifuged 15 min at ambient temperature at 1500 x g (3000rpm, ~~Heraeus~~ HERAEUS™ (centrifuge) Varifuge, rotor 8074); supernatant was discarded, and remaining methanol allowed to evaporate (15 min at ambient temperature); the pellet was dissolved in 500µl ~~Lysisbuffer~~ mtm lysis buffer and transferred to a 1.5 ml reaction vessel. The solution was centrifuged at 4°C (15 min at 28000 x g (16600rpm Microcentrifuge ~~Biofuge~~ BIOFUGE® (centrifuge) fresco)); Supernatant was transferred to a fresh tube. Supernatant may be stored at – 20 °C.